

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0123692; AI 152811; PER20070001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Northlake Environmental Engineering Services, Inc
 Oaklawn Trace
 P.O. Box 217
 Mandeville, LA 70470

- II. **PREPARED BY:** Rachel Owens

- DATE PREPARED:** May 1, 2008

- III. **PERMIT ACTION:** Issue LPDES permit LA0123692, AI 152811; PER20070001
 LPDES application received: September 4, 2007

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Oaklawn Trace subdivision.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located on the East of N. Mill Road off of Hwy 190 in Lacombe, St. Tammany Parish.

- D. The treatment facility consists of a 65,000 GPD mechanical sewage treatment plant with tertiary filter and chlorine disinfection.

- E. Outfall 001

Discharge Location: Latitude 30° 17' 59" North
 Longitude 89° 53' 24" West

Description: treated sanitary wastewater

Expected Flow: 159 homes x 400 gallons/day/home = 0.0636 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

V. **RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into Cypress Bayou, thence into Bayou Lacombe in segment 040902 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 040902 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

| Overall Degree of Support for Segment 040902 | Degree of Support of Each Use | | | | | | |
|--|-------------------------------|------------------------------|--------------------------------|------------------------------------|-----------------------|------------------------|-------------|
| | Primary Contact Recreation | Secondary Contact Recreation | Propagation of Fish & Wildlife | Outstanding Natural Resource Water | Drinking Water Supply | Shell fish Propagation | Agriculture |
| Partial | Not Supported | Full | Not Supported | Full | N/A | N/A | N/A |

^{1/}The designated uses and degree of support for Segment 040902 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040902 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWLS) as habitat for the Gulf sturgeon, which is listed federally as a threatened species. However, this type of discharge is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge will be from a new facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated September 24, 2007 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response, dated October 22, 2007 stated that the facility as proposed will have no potential effects.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

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Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Owens
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 040902, Bayou Lacombe- US Hwy 190 to Lake Pontchartrain (scenic), is listed on LDEQ's Final 2006 303(d) List as impaired for organic enrichment/low DO and pathogen indicators. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL.

Organic enrichment/low DO

To protect against the potential for oxygen consuming pollutants that could cause instream DO problems, and for the discharges of organic materials and nutrients at levels exceeding state water quality standards, CBOD₅ limitations have been established in the permit

Pathogen Indicators

To protect the receiving waterbody against high levels of pathogenic organisms, fecal coliform limitations have been established in the permit

Outstanding Natural Resource Water

Bayou Lacombe, Subsegment 040902, is a designated Outstanding Natural Resource Waterbody. In accordance with LAC 33:IX.111.G, this use designation applies only to Bayou Lacombe and not its tributaries or distributaries. Because the proposed discharge will be made into an unnamed ditch, thence into Cypress Bayou, this use designation does not apply.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

| Effluent Characteristic | Monthly Avg. | Weekly Avg. | Basis |
|-------------------------|--------------|-------------|---|
| CBOD ₅ | 5 mg/l | 10 mg/l | Best Professional Judgement (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03. |

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| Effluent Characteristic | Monthly Avg. | Weekly Avg. | Basis |
|-------------------------|--------------|-------------|--|
| TSS | 5 mg/l | 10 mg/l | Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility. |
| Ammonia-Nitrogen | 2 mg/l | 4 mg/l | Best Professional Judgement (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03. |
| Dissolved Oxygen** | 5 mg/l | N/A | Best Professional Judgement (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03. |

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

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There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

This discharge is from a new facility. There are no previously issued permits.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates that no inspections have been performed at the proposed facility.

B) Compliance and/or Administrative Orders

A review of the files indicates there have been no enforcement actions administered against the proposed facility.

C) DMR Review

There has been no discharge monitoring reports submitted for the proposed facility.

XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The LDEQ and USEPA will be conducting TMDLs in the Lake Pontchartrain Basin Subsegment 040902. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.02 and 0.10 MGD.

Effluent Characteristics

Flow
CBOD₅

Monitoring Requirements

| <u>Measurement</u> | <u>Sample</u> |
|--------------------|---------------|
| <u>Frequency</u> | <u>Type</u> |
| 1/week | Measure |
| 1/month | Grab |

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| | | |
|-------------------------|---------|------|
| Total Suspended Solids | 1/month | Grab |
| Ammonia-Nitrogen | 1/month | Grab |
| Dissolved Oxygen | 1/month | Grab |
| Fecal Coliform Bacteria | 1/month | Grab |
| pH | 1/month | Grab |

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Northlake Environmental Engineering Services, Inc, Oaklawn Trace, September 4, 2007.